

An Extensive Study on Drug Abuse among Medical and Paramedical Learners

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Abstract

Background: One of the biggest societal issues in several nations is substance abuse. Students studying medicine and paramedicine are in huge danger of devastating repercussions if they consume drugs. This study is aimed at finding the extent of drug abuse, identifying causal factors, and analysing the health risks of drug abuse among medical and paramedical students in Chennai, Tamil Nadu. **Method:** The study was done with 250 medical and paramedical students using a self-structured questionnaire method. The data was entered and analysed. **Result:** Out of 250 students most of the respondents were males with 62% and females with 38%. Alcohol was the most used drug, followed by marijuana. The main factor for drug abuse is teenager's curiosity and followed by friends offer. The major health risks were forgetfulness and depression. **Conclusion:** This research indicated that drug abuse is generally typical in both medical and paramedical students, for whom proper counselling with well-planned policies should be given in order to be aware of the dangers of using drugs.

Key words: Drug abuse, Medical students, Health risks.

1. Introduction

Drug abuse is a major societal issue all over the world. Drug abuse or substance abuse refers to the use of some chemicals for pleasure. It ruins many of the lives and be the important part in the consequences on society. According to the World Health Organization (WHO), drug abuse is more prevalent among teenagers and young adults. Roy RK (2018) states that particularly College students are one of the hazard categories for substance abuse. Especially medical students, who are prospective surgeons, have commitments that set them apart from other learners and give them a special place in society. Drug abuse by medical students is at risk and has severe consequences. Several studies have documented the increase in drug abuse, particularly among young people, and the risk it poses to global health.

According to a current WHO assessment, there seem to be 1.3 billion smokers, 2 billion drinkers, and 185 million drug users who use intoxicants worldwide. Learners often use drugs, alcohol, marijuana, tobacco, and other substances, even though they know how bad they are for them. Neha (2020) says that teens are more likely to drink alcohol (19.0%) than to smoke (8.3%). In India, smoking prevalence among youth has been estimated at 14.6%. A national survey in India from 2015 to 2016 revealed that 44.5% of adolescents use cigarettes, 6.8% use alcohol, and 29.2% of men use tobacco.

Catalina (2014) explains that all health professionals should be aware of the significant risk of harm from drug use and their mandatory reporting responsibilities. Male medical students have a higher level of intake compared to females. The danger of alcohol use is significantly more in those with high levels of psychological distress. This drinking level is low compared to the general population, which has an approximately 8.1% rate of harmful drinking.

In the past few years, drug use has increased all over the world. The main fact is that the intimation age of drug use is gradually decreasing. The medical field has always been the most stressful of all. The youth with academic minded manage to choose medical field even though the stressful environment can strive negative impacts on physical and physiological wellbeing. Increasingly, most of them use alcohol and illicit drugs. Some research shows that many university students consume more alcohol and experiment with illegal substances. The fact that young doctors are more aware of the potential hazards of alcohol and illegal substances does not distinguish them considerably from other students. Sanjeev Kumar (2016) states that drug abuse has a unique significance among medicinal students because they are the future doctors and play an important role in treating and counselling patients with drug addiction disorders. Drug abuse is getting a lot worse all over the world, and these illnesses are always reported in India. Several studies show that medical students are more likely to use drugs because they have easy access to drugs that make them feel high, their jobs are stressful, and they see a lot of sick people and people who die, which disrupts their sleep and social life (Sanjeev Kumar, 2016).

2. Review of Literature

A study by Ahmed A. (2014) focused on the incidence and contributing elements of sedative medication usage among Saudi Arabian medical students. Sedatives were mainly used in the medical field; therefore, there is a higher risk for medical students. A cross-sectional sampling study was done among the 729 students who answered the questionnaire. The findings show that among them, 17% were using sedative drugs. Taking sedatives is strongly linked to several things, such as longer school years, lower grades, regular activity, not getting enough sleep at night, and having trouble sleeping. Since the narcotic drug abuse is increased and at high risk it is required further study to understand the patterns of use which will be helpful for occurrence for early intervention programs.

Likewise, Gignon M. (2015) done a study with French medical students, with a total number of 255 participants randomly selected from 1021 students. The students from second year to sixth year were selected for the study. A cross-sectional survey was used. Self-administered questionnaires like sociodemographic features, psychological illness, and the AUDIT test (the Alcohol Use Disorders Identification Test) for alcohol, the Fagerstrom assessment (for cocaine), and the CAST assessment (the Cannabis Abuse Screening Test) for illegal substance consumption were used. According to the AUDIT results, 11% of the respondents were at risk of becoming addicted, while 21% were high-risk users. 12% of the participants had tobacco dependence. One-quarter of medical student participants (n = 41) had used other illegal drugs, and 10% had committed suicide in the past 12 months. Supports to be provided to the students and participate in public health program.

In a similar way, a cross-sectional survey study by Paul Bogowicz (2018) was done at a United Kingdom university among medical and law students. Out of 1577 students, 1242 (78.8%) have participated in this study. First-year medicinal learners responded with a 100% response rate. second year were 94.5% and final year were 74.0% respectively. While first-year legal candidates' number of responses were 85.9%, second year were 54.5% and the final year were 29.8% respectively. In contrast to two-thirds of first- and second-year law students, 50% of first- and second-year medical students had marks on the Alcohol Use Disorders Identification Test (AUDIT) that were evocative of an alcohol use disorder (AUDIT 8). Across one third of first- and second-year law school students and one-fourth of medical students both confessed to using another drug within the past year. A Hospital Anxiety and Depression Scale anxiety score suggestive of prospective social anxiety was present in much more than one-third of medical students and around half of law students. The learner's levels of anxiety and their drug usage were both very high. Due to their substance abuse and/or signs of psychological anguish, certain pupils may be affected. Some measures to be taken for mental wellbeing of the students

In India, a cross-sectional survey was done by Arora et al. (2014) in Meerut, North India. Students studying at a private medical college were taken as samples. The incidence of drug dependence among medicinal learners is the focus of this study. 230 samples were taken as samples and questionnaire were provided to under graduate and post graduate students. The prevalence was about 20.43% (47 students) among the students. The prevalence is significantly higher in males than in females ($p < 0.0001$). A total of 91.7% of students were knowledgeable about the negative impacts of substance addiction and abuse. In this study the common reason

for substance abuse is to relieve psychological stress (72%) and 40.4% students have experienced ill effects of drug abuse. One of the learners tried to stop but was unsuccessful since they lacked determination. Psychological stress was the primary cause of substance abuse.

Another similar study of drug use among medicinal learners was conducted by Datta (2015) in a medical college in Kolkata. The findings shows that the prevalence of the students with substance abuse was 57%. From them 76% of second year students use drugs more than others. The most used substances were tobacco, alcohol, and cannabis. The main reason was Psycho social stress with 66% and curiosity with 39.2%. Source of drugs was from friends. Substance abuse is very common in medical students, and it is more prevalent in higher-year students.

In 2017, a study was done by Bimala Panthee in Nepal among Nepalese health care students in three universities among pharmacy, nursing, and public learners who are studying medicine. It is a cross-sectional survey method with a self-administered questionnaire. Totalling 407 respondents, the overall prevalence was 42.8%. The most used illegal drug was marijuana with 8.8% and minor opiates like cough syrups with 32.4%. Peer influence and heavy drinking were associated with substance use. Also reported the students have major and minor disorders due to substance abuse. For the prevention of drug abuse treatment policy to convey peer support programs among health care students.

In a similar vein, cross-sectional investigative survey research was carried out by Gururaj and Mohan (2018) in Chennai. Data were collected from three colleges. Purposive sampling was used to select learners from each college. and a total of 74 students were included in this study. Categories were 25 students from engineering, 23 from nursing and 26 from arts and Sciences College. The questionnaire used was the Drinking Motives Questionnaire—Revised (DMQ—R; Cooper, 1994) to explore the purposes of drinking. Students drinking alcohol with a 43.2% belongs to (701-900) marks category. The findings shows that the primary reasons people drink alcohol were Social and coping motive. There should be Concentrate on motivating factors and personal development to consume alcohols by prevention programs and research with better understanding the factors related to drug use is needed in Chennai.

3. Objective

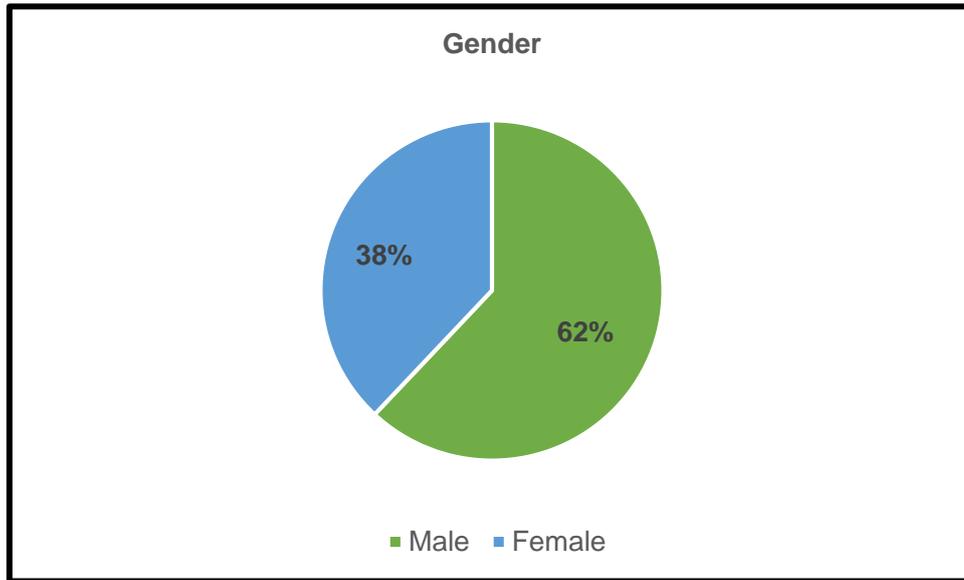
- To examine the impact of drug abuse among medical and paramedical students
- To determine the influencing factors for drug abuse among the respondent
- To investigate the short-term complications of drug abuse among the respondent

4. Methodology

This descriptive study was conducted at two colleges in Chennai, Tamil Nadu. The target populations were medical and paramedical students who are studying 3rd and 4th year. One of the non-probability sampling techniques, viz., the samples for the current study, was a purposive sampling technique. The primary data were collected from a sample of 250 medical and paramedical students using a questionnaire method. Self-structured questionnaires were distributed to the 200 respondents in person after getting their informed consent. And 50 questionnaires were collected via Google forms and all had responded to it. The collected data was analysed for results.

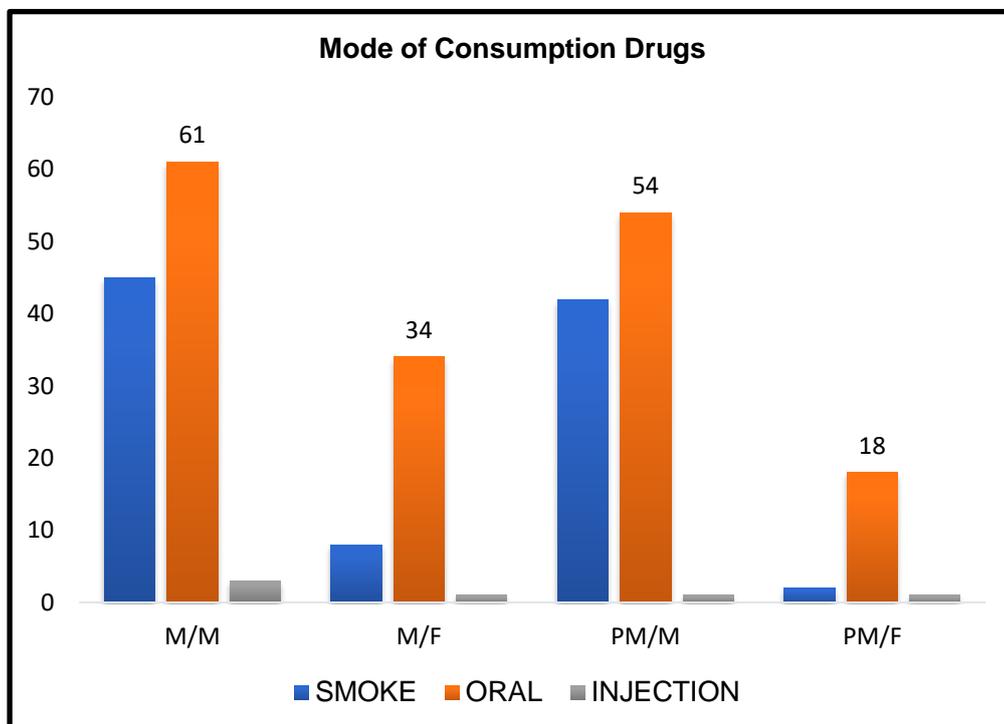
5. Data Analysis and Interpretation

Figure 5.1.1: Gender of the Respondents



From the figure 5.1.1, it shows that, in this study the 62 percent of the respondents were male students and 38 percent were female students.

Figure 5.1.2: The Mode of Consumption Drugs by the Respondents.



From the above figure 5.1.2, it is understood that, among medical students, 67 percent of males and 56 percent of females consume drugs orally, and 50 percent of males and 13 percent of females consume drugs by smoking. Likewise, in paramedical students, 83 percent of males and 51 percent of females consume drugs orally, while 64 percent of males and 5.7

percent of females consume drugs through smoking. It is inferred from the findings that the mode of consumption like oral and smoke were found to be consumed by significant percent of the respondent.

Table 5.2.1: The influencing factors to drug abuse

Factors Influence Individuals	Medical Student		Para Medical Student	
	Male-90	Female-60	Male-65	Female-35
Teenager curiosity	40 (44%)	3(5%)	50 (76%)	18 (51%)
Psychiatric disorder	1 (1.1%)	3 (5%)	4 (6.1%)	3 (8.5%)
To eliminate shyness	20 (22%)	4 (6.6%)	27 (41%)	2 (5.7%)
Having strict parents	5 (5.5%)	7 (11.6%)	7 (10%)	8 (22%)
Friends offer	20 (22%)	15 (25%)	44 (67%)	5 (14%)
Family disputes	10 (11%)	7 (1.6%)	16 (24%)	9 (25%)
Easy access to drugs	6 (6.6%)	9 (15%)	11 (16%)	6 (17%)
Having free time	7 (7.7%)	5 (8.3%)	8 (12%)	9 (25%)
Weight gain (especially beer)	3 (3.3%)	9 (15%)	2 (3%)	7 (20%)
Peer pressure	3 (3.3%)	2 (3.3%)	5 (7.6%)	6 (17%)

Table 5.2.1 shows the following factors influence individuals towards drug abuse. In medical students 44 % of male and 5 per cent of female were influenced by Teenager curiosity, 22 per cent of male and 6.6 per cent of female used drugs to eliminate shyness, and 22 % of male and 25 % of female is by Friends offer. In paramedical students 76 % of male and 51 % of female were influenced by Teenager curiosity, 67 % of male and 14 per cent of female used drugs to friends offer. The finding clearly indicates that paramedical students, both male and female, stated that teenagers' curiosity is one of the key factors that influence individuals to engage in drug abuse. With regards to drug abuse, offers from friends are one of the influencing factors.

Table 5.2.2: Significant short-term complications of drug abuse among the respondent

Short-Term Complications	Medical Student		Para Medical Student	
	Male-60	Female-60	Male-65	Female-35
Anxiety	9 (10%)	3 (5%)	3 (4.6%)	6 (17%)
Depression	33 (36%)	9 (15%)	36 (55%)	8 (22%)
Forgetfulness	40(44%)	9 (15%)	22 (33%)	2 (5.7%)
Aggressiveness	6 (6.6%)	2 (3.3%)	11(16%)	3 (8.5%)
Personality disorder	1 (1.1%)	1 (1.6%)	1(1.5%)	1 (2.8%)
Sleep disorder	1 (1.1%)	2 (3.3%)	2 (3.0%)	1(2.8%)
Euphoria and happiness	2 (2.2%)	3 (5%)	2(3.0%)	1(2.8%)
Withdrawal symptoms	1 (1.1%)	2 (3.3%)	3(4.6%)	1(2.8%)
Dependence to drugs	3 (3.3%)	1 (1.6%)	1 (1.5%)	3(8.5%)
Lung, liver, kidney disease	2 (2.2%)	2 (3.3%)	1(1.5%)	2(5.7%)

The table 5.2.2 shows the significant short-term complications of drug abuse among the respondents. In medical students, 44 percent of males and 15 percent of females had forgetfulness; 36 percent of males and 15 percent of females had depression; and 10 percent of males and 5 percent of females had anxiety. In paramedical students, 55 % of males and 22 % of females had forgetfulness; 33 % of males had depression; 17 % of females had anxiety; and 8.5% of females had both aggressiveness and dependence on drugs. The finding clearly states that depression, anxiety, and forgetfulness are the main significant short-term complications of drug abuse.

6. Findings

The findings of the present study show gender responses to a questionnaire in a cross-sectional study. The outcome of the male shows 62% of response and much higher than females with 38% of response. In this study, a sample is collected from third- and fourth-year medical and paramedical students in Chennai, Tamil Nadu. Cross-sectional study outcomes showed that male students used alcohol (72% medical and 83% paramedical) and marijuana (60% medical and 69% paramedical) more, and that cigarettes, liquids, and injections were more available in their surroundings. Study outcomes showed that medical and paramedical students consumed drugs mostly in smoke, oral, and injection ways, and that the following factors influenced drug abuse: teen curiosity (76%), eliminating shyness (41%), and a friend's offer (64%). The main symptoms of drug abuse experienced are nausea (87%), abdominal pain (69%), a change in mental status, and a change in mood, personality, or behaviour (63%). Drugs induced had a significant short-term complications like depression (55%), forgetfulness and aggressiveness (44%) showed more in medical and paramedical students.

7. Suggestion

Proper health education should be given by the institution about drug abuse. Given the significant prevalence of drug addiction, notably smoking, and drinking alcohol, it would appear that the government should develop educational initiatives to combat drug usage. Counseling should be given to the students and their parents about the prevention of unhealthy habits. Classes are to be conducted about drug abuse in the early stages of adolescence.

8. Conclusion

Drug abuse is found worldwide, including among students. Although users were aware of the risks associated with these substances, their continued use revealed a lack of health awareness and the need for comprehensive health education. In order to eradicate substance addiction among future doctors and improve the quality of healthcare services offered to the public, adequate counselling and well-planned policies need to be put in place. To find every student misusing one or more drugs, a thorough search for abusers needs to be done on a regular basis.

The consequences of drug taking must be made more widely known, and students must be constantly reminded that drug experimentation can escalate into dependence and abuse. Due to its extremely difficult professional and academic standards, medicine is one of the most challenging academic domains. Students who study medicine and paramedicine frequently experience mental trauma, tension, sadness, and sleeplessness. The fourth- and final-year students were the ones who used drugs the most frequently. They use drugs mostly like cigarette, liquid, and injection type by the source of some friends offer and some by the strangers. This study mainly focused on the medical and paramedical students on drug abuse which is a leading problem in both national and international.

As the future's doctors and professionals, medical and paramedical learners occupy a special position in society and are accorded rewards and commitments that are distinct from those of other students.

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